



ATTITUDE OF STUDENT TEACHERS TOWARDS THE USE OF INTERACTIVE WHITEBOARD

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ABSTRACT

The purpose of this study is to investigate attitude of student teachers towards the use of interactive whiteboard. The investigator has taken 180 student teachers from B.Ed. colleges by using simple random sampling technique. For collection of data the investigator has used attitude towards the use of interactive white board scale constructed and standardized by the investigator and t-test has also used for analysis and interpretation data. The result of the study reveals that student teachers have favourable attitude towards the use of interactive white board. This trend is seen in respect of the sub-samples, too.

KEY WORD: Interactive white board, attitude, student teachers.

INTRODUCTION

In this context technology has been playing an important role for promoting relevant and interesting education. Smart technology is likely to influence education enormously and can play an important role in enhancing the efficiency of the teaching and learning process, making students more creative and providing them with an individual learning environment. As a part of the smart technology integration process, the interactive whiteboard has been one technology more used in teaching and learning process. Interactive white boards are powerful learning tools as they enable teachers to instruct using the latest technology, with access to the internet, videos, and educational software (Fernandez & Luftglass, 2003). IWB is a touch-sensitive whiteboard that is connected to a computer and a projector. Lessons or presentations are made on computer programs and then the projector displays the image onto the whiteboard. The computer is then controlled by either using your finger to open or close programs and move objects, or by electronic pens to write words. Using this pen, teachers write directly on the IWB screen. They should use text and images, view video clips, formulate graphs and charts and tables, search website get more information. Use of smart board makes the teaching easy for the teachers and learning the concept easy for the students. Students become more interactive and volunteering in the classes (Anita, 2015).

The interactive white board might be one of the methods that teachers can use to enhance the effectiveness of their lessons. The IWB is large, touch-sensitive board that is connected to a digital projector and a computer. The projector displays an image from the screen of the computer onto the whiteboard (Wallace, 2007). Participants become both visually and physically engaged as they connect with electric content and multimedia in a collaborative learning environment (smart technologies, 2004). From a pedagogical perspective, there are a number of key features of interactive whiteboards which take their role beyond mere display: their interactivity, which facilitates active learning, not just passive reception of information; their size, which facilitates collaborative group working; their accessibility for all learners but especially young children and those with a visual or physical impairment; their record ability, so that any end product can be stored for subsequent re-use, or deconstructed to analyse a process (Glover and Miller 2002).

REVIEW OF RELATED STUDIES

Nuri and Muharrem (2015) conducted a study on attitudes of students and teachers towards the use of interactive whiteboards in elementary and secondary school classrooms. They tried to understand teachers' and students' attitudes toward interactive whiteboard technology along with differences in attitudes resulting from some demographic factors. Two parallel surveys consisting of 25 items were applied to 255 students and 23 teachers from three private schools. Students from sixth to twelfth grades and teachers from 15 different branches participated in this research study. The results indicated that interactive whiteboards are highly rated by both teachers and students. Students mostly prefer the usage of interactive whiteboards in math courses, and their attitudes differ across their genders and school levels. As students get elder, their positive attitudes toward interactive whiteboard technology decrease, and it has been found out that there is no difference between teachers' and students' attitudes. This study includes some implications for policy makers, educator and researchers.

Amani and Yousif (2015) studied about teachers' attitudes toward using interactive whiteboards in English language classrooms. They explored that the attitudes and insights of Saudi female teachers regarding the use of IWBs when teaching English as a foreign language (EFL). They also investigated possible obstacles they may face during their use of this novel technology. Data was col-

lected by distributing questionnaires to forty three teachers at different girls' schools in Riyadh. The results indicated that participants in this study demonstrated positive attitudes toward using the IWB in the EFL classrooms. The results also showed that teachers consider IWBs to be useful devices for enhancing the teaching and learning process and for designing new instructional situations. IWB-based lessons were perceived to be more comfortable for teachers in teaching English. However, teachers stated that they faced some technical obstacles in their use of IWBs. The current study recommended that EFL classes should be equipped with all supplicants of the IWBs. They also suggested that training is important for teachers to deal with the technological devices. EFL teachers need more training to learn how to resolve technical and system problems; they also need to understand how to use all the options offered by the IWBs.

Isman et al. (2012) investigated that Saudi secondary school teachers attitudes' towards using interactive whiteboard in classrooms. They used the Quasi-Experimental approach, with one group (100) teachers, and limited to the Secondary school Teachers that enrolled in the first semester of (2011/2012) academic year. They used Interactive Whiteboard Attitude Survey, observation skill card for using Interactive Whiteboard in the classrooms and structured interviews with students. The results indicated that there were apposite attitude towards using Interactive Whiteboard. But a few number of teachers used effectively the Interactive Whiteboard effectively in the classrooms. These results indicated that the teachers need a professional development program for effective using of Interactive Whiteboard effectively to help them in improving their Teaching skills and the students learning.

OBJECTIVES OF THE STUDY

The following are the objectives formulated by the investigators for the present investigation:

1. To study the student teachers attitude towards the use of interactive white board,
2. To study if there is any significant difference between the male and female student teachers in respect of their attitude towards the use of interactive white board,
3. To study if there is any significant difference between the graduate and post graduate student teachers in respect of their attitude towards the use of interactive white board
4. To study if there is any significant difference between student teachers having internet facility at home and not having internet facility at home in respect of their attitude towards the use of interactive white board,

METHODOLOGY

Research design: The investigator adapted normative survey method to pursue his study.

Sample and sampling technique: The sample comprises 180 randomly selected students' teachers from 3 B.Ed. College in Thanjavur District selected by lottery method.

Tool: Attitude towards the use of interactive white board scale constructed and validated by the investigator used for collecting the data. It included 24 items from strongly agree to strongly disagree; it measures in three dimensions such as

educational motivation, pedagogical benefits, and technological interest. For the present tool validity was established by taking the opinion of experts and teachers who were active IWB users across various subject areas and relevant changes were made hence the tool has got content and constructs validity. Reliability was found by cronbach's alpha (0.76) and tool was found to be reliable.

Data analysis and interpretation: The data was analysed through descriptive as well as inferential statistics. The normality of data is assessed by calculating the values of mean, median, S.D. In order to study the significant difference in attitude towards the use of interactive white board with regard to gender and locality t-test was employed.

Table-1

Significance of the difference between the means of the attitude towards the use of interactive white board scores of the various categories of the sub-samples

Variables	N	Mean	SD	't' Value	Significance at 0.05 level
Entire sample of student teachers	180	73.64	17.61	--	--
Male student teachers	52	84.00	16.90	5.30	Significant
Female student teachers	128	69.43	16.15		
Graduate student teachers	136	73.15	18.32	0.71	Not significant
Post graduate student teachers	44	75.15	15.31		
Student teachers having internet facility at home	38	89.13	14.90	7.10	Significant
Student teachers not having internet facility at home	142	69.50	15.92		

The following inferences are drawn from the Table – 1. In respect of the entire sample and their sub-samples of the student teachers, all of them have a favourable attitude towards the use of interactive white board as their mean scores were above 53 upto 107. This trend is seen in respect of the sub-samples too.

From Table -1, it has been inferred that, there is no significant difference between the graduate and post graduate student teachers ('t' value = 0.71) in respect of their attitude towards the use of interactive white board. It is also found that there is a significant difference between the male and female student teachers ('t' value = 5.30) and student teachers having internet facility at home and not having internet facility at home ('t' value = 7.10) in respect of their attitude towards the use of interactive white board.

IMPORTANT FINDINGS

The following are the important findings obtained from the present investigation:

- The entire samples of the student teachers have favourable attitude towards the use of interactive white board. This trend is seen in respect of the sub-samples, too.
- There is a significant difference in attitude towards the use of interactive white board between male and female student teachers. Moreover male student teachers are found to be better than the female student teachers in respect of their attitude towards the use of interactive white board.
- There is no significant difference in attitude towards the use of interactive white board between graduate and post graduate student teachers.
- There is a significant difference between student teachers having internet facility at home and not having internet facility at home in respect of their attitude towards the use of interactive white board. Moreover student teachers having internet facility at home are found to be better than the student teachers not having internet facility at home in respect of their attitude towards the use of interactive white board.

CONCLUSION

The present investigation has revealed that majority of student teachers have favourable attitude towards the use of interactive white board. They prefer using it instead of a traditional board. They were comfortable with IWBs.

REFERENCES

- Aggarwal, Y.P. (1986). Statistical Methods: Concepts, Application and computation. New Delhi: Sterling publisher (P) Ltd.
- Wallace, A (2007). Presentation at: Do IWBs have a future in the UK classroom? Promethean/Future lab debate. London 2007.
- Anita Menon. (2015). Effectiveness of smart classroom teaching on the achievement in chemistry of secondary school students. American international journal of research in humanities, arts and social sciences, 15, 132.
- Smart technologies Inc. (2004). Interactive whiteboard and learning: A review of class-

room class room case studies and research literature. Retrieved from <http://www.smarterkids.org/research>.

- Fernandez, J. And Luftglass, M. (2003). Interactive whiteboards: A powerful learning tool. Principal, The Embattled Principal, Tech Support, 83, 63.
- Glover, D. and Miller, D. (2002): The interactive whiteboard as a force for pedagogic change: the experience of five elementary schools in an English education authority. Information Technology in Childhood Education. Norfolk, Vermont, AACE.
- Nuri Balta and Muharrem Duran. (2015). Attitudes of students and teachers towards the use of interactive whiteboards in elementary and secondary school classrooms. The Turkish Online Journal of Educational Technology ,14 (2).
- Amani K. Gashan and Yousif A. Alshumaimeri. (2015). Teachers' attitudes toward using interactive whiteboards in English language classrooms. International Education Studies, 8 (12).
- Isman, Aytekin; Abanmy, Fahad AbdulAziz; Hussein, Hisham Barakat and AlSaadany, Mohammed Abdelrahman .(2012). Saudi secondary school teacher's attitudes towards using interactive whiteboard in classrooms. The Turkish Online Journal of Educational Technology, 11 (3).